

Express Mail Label: EV329724009US

PTO/SB/01 (10-01)

Approved for use through 10/31/2002. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63) <input checked="" type="checkbox"/> Declaration Submitted with Initial Filing OR <input type="checkbox"/> Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)	Attorney Docket Number	38898-0049
	First Named Inventor	DUXBURY, Guy et al.
	COMPLETE IF KNOWN	
	Application Number	
	Filing Date	
	Art Unit	
	Examiner Name	

As the below named inventor, I hereby declare that:

My residence, mailing address, and citizenship are as stated below next to my name.

I believe I am the original and first inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**OFFSETTING PATCH ANTENNAS ON AN OMNIDIRECTIONAL MULTI-FACETTED
ARRAY TO ALLOW SPACE FOR AN INTERCONNECTION BOARD**

(Title of the Invention)

the specification of which

☒ is attached hereto

OR

☐ was filed on (MM/DD/YYYY)

as United States Application Number or PCT International

Application Number [] and was amended on (MM/DD/YYYY) [] (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT International application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT International application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed:	Certified Copy Attached?	
60/451,897	U.S.A.	03/04/2003	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

Burden Hour Statement: This form is estimated to take 21 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

PTO/SB/01 (10-01)

Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

DECLARATION — Utility or Design Patent Application

Direct all correspondence to: <input type="checkbox"/> Customer Number or Bar Code Label		OR <input type="checkbox"/> Correspondence address below	
Name			
Address			
City		State	ZIP
Country	Telephone		Fax
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.			
NAME OF SOLE OR FIRST INVENTOR:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name Guy (first and middle (if any))		Family Name DUXBURY or Surname	
Inventor's Signature		Date	
Nepean Residence: City	ON State	Canada Country	Canadian Citizenship
56 Foothills Drive			
Mailing Address			
Nepean City	ON State	K2H 6K3 ZIP	Canada Country
NAME OF SECOND INVENTOR:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name Robert (first and middle (if any))		Family Name SHEFFIELD or Surname	
Inventor's Signature		Date	
Ottawa Residence: City	ON State	Canada Country	Canadian Citizenship
87 Hopewell Avenue			
Mailing Address			
Ottawa City	ON State	K1S 2Y9 ZIP	Canada Country
<input checked="" type="checkbox"/> Additional inventors are being named on the _____ supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto.			

PTO/SB/02A (10-00)

Approved for use through 10/31/2002. OMB 0651-0022

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

DECLARATION	ADDITIONAL INVENTOR(S) Supplemental Sheet Page <u>1</u> of <u>1</u>
--------------------	--

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name: David		Family Name or Surname: BOLZON	
Inventor's Signature: _____		Date: _____	
Residence: City: Kanata	State: ON	Country: Canada	Citizenship: Canadian
Mailing Address: 36 Bon Echo Crescent			
City: Kanata			
State: ON		ZIP: K2M 2W6	Country: Canada
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name: Ian		Family Name or Surname: ABRAHAM	
Inventor's Signature: <i>I. A. Abraham</i>		Date: 25-Sept-2003	
Residence: City: Bishops Stortford	State: Hertfordshire	Country: United Kingdom	Citizenship: Cayman Islands UK
Mailing Address: 18 Little Heath, Hatfield Heath,			
City: Bishops Stortford			
State: Hertfordshire		ZIP: CM22 7EP	Country: United Kingdom
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name: Andrew		Family Name or Surname: URQUHART	
Inventor's Signature: <i>A. Urquhart</i>		Date: 25 Sept 2003	
Residence: City: Bishops Stortford	State: Hertfordshire	Country: United Kingdom	Citizenship: United Kingdom
Mailing Address: 22 Woodpecker Close			
City: Bishops Stortford			
State: Hertfordshire		ZIP: CM234QA	Country: United Kingdom

Burden Hour Statement: This form is estimated to take 21 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

**DECLARATION FOR UTILITY OR
DESIGN
PATENT APPLICATION
(37 CFR 1.63)**

☒ Declaration Submitted with Initial Filing OR ☐ Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)

Attorney Docket Number	38898-0049
First Named Inventor	DUXBURY, Guy et al.
COMPLETE IF KNOWN	
Application Number	
Filing Date	
Art Unit	
Examiner Name	

As the below named inventor, I hereby declare that:

My residence, mailing address, and citizenship are as stated below next to my name.

I believe I am the original and first inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**OFFSETTING PATCH ANTENNAS ON AN OMNIDIRECTIONAL MULTI-FACETTED
ARRAY TO ALLOW SPACE FOR AN INTERCONNECTION BOARD**

(Title of the Invention)

the specification of which

☒ is attached hereto

OR

☐ was filed on (MM/DD/YYYY)

as United States Application Number or PCT International

Application Number [] and was amended on (MM/DD/YYYY) [] (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				YES	NO
60/451,897	U.S.A.	03/04/2003	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

[Page 1 of 2]

Burden Hour Statement: This form is estimated to take 21 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

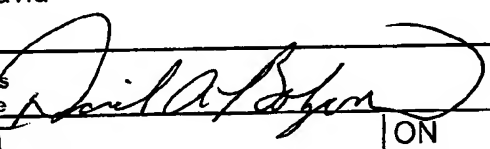
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

DECLARATION — Utility or Design Patent Application

Direct all correspondence to: <input type="checkbox"/>		Customer Number or Bar Code Label		OR <input type="checkbox"/>		Correspondence address below	
Name							
Address							
City				State		ZIP	
Country			Telephone			Fax	
<p>I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.</p>							
NAME OF SOLE OR FIRST INVENTOR :				<input type="checkbox"/> A petition has been filed for this unsigned inventor			
Given Name Guy (first and middle [if any])				Family Name DUXBURY or Surname			
Inventor's Signature <i>Guy A. Duxbury</i>				Date 29 Sept 03			
Nepean Residence: City		ON State		Canada Country		Canadian Citizenship	
56 Foothills Drive							
Mailing Address							
Nepean City		ON State		K2H 6K3 ZIP		Canada Country	
NAME OF SECOND INVENTOR:				<input type="checkbox"/> A petition has been filed for this unsigned inventor			
Given Name Robert (first and middle [if any])				Family Name SHEFFIELD or Surname			
Inventor's Signature <i>R. Sheffield</i>				Date 29 th Sept 03			
Ottawa Residence: City		ON State		Canada Country		Canadian Citizenship	
87 Hopewell Avenue							
Mailing Address							
Ottawa City		ON State		K1S 2Y9 ZIP		Canada Country	
<input checked="" type="checkbox"/> Additional inventors are being named on the _____ supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto.							

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

DECLARATION	ADDITIONAL INVENTOR(S) Supplemental Sheet Page <u>1</u> of <u>1</u>
--------------------	--

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
David Given Name		BOLZON Family Name or Surname	
Inventor's Signature 		Date <u>29 Oct 01</u>	
Kanata Residence: City	ON State	Canada Country	Canadian Citizenship
36 Bon Echo Crescent Mailing Address			
Mailing Address			
Kanata City	ON State	K2M 2W6 ZIP	Canada Country
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Ian Given Name		ABRAHAM Family Name or Surname	
Inventor's Signature		Date	
Bishops Stortford Residence: City	Hertfordshire State	United Kingdom Country	Cayman Islands Citizenship
18 Little Heath, Hatfield Heath, Mailing Address			
Mailing Address			
Bishops Stortford City	Hertfordshire State	CM22 7EP ZIP	United Kingdom Country
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Andrew Given Name		URQUHART Family Name or Surname	
Inventor's Signature		Date	
Bishops Stortford Residence: City	Hertfordshire State	United Kingdom Country	United Kingdom Citizenship
22 Woodpecker Close Mailing Address			
Mailing Address			
Bishops Stortford City	Hertfordshire State	CM234QA ZIP	United Kingdom Country

Burden Hour Statement: This form is estimated to take 21 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

File: 38898-0049 MG:TLS:lmc

Applicant: Nortel Networks Limited
Title: OFFSETTING PATCH ANTENNAS ON AN OMNIDIRECTIONAL
MULTI-FACETTED ARRAY TO ALLOW SPACE FOR AN
INTERCONNECTION BOARD
Serial No.: (unknown)
Filed: (unknown)
Executed: September 26, 2003

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPOINTMENT OF ASSOCIATE AGENT

The undersigned, Mitchell B. Charness, Registration No. 46,416, principal attorney and/or agent appointed to prosecute this application hereby appoints as his associate attorney and/or agent to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith:

Lindsay McGuinness, (Registration No. 38549)

Mary Steubing, (Registration No. 37946)

of Steubing McGuinness & Manaras L.L.P. 30 Nagog Park, Acton, MA, 01720, United States of America.

Address all telephone calls to Ms. Lindsay McGuinness at (978) 264-6664 x304 and address all correspondence to Steubing McGuinness & Manaras L.L.P. at the above-captioned address.



Mitchell B. Charness

APPENDIX B-9

PATENT/DOCKET NO. _____
CUSTOMER NO. _____

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:	§ Attorney Docket No. 38898-0049
	§
Serial No.: n/a	§
	§
Filed: Herewith	§ Group Art Unit: n/a
	§
Title: OFFSETTING PATCH ANTENNAS ON	§ Examiner: n/a
AN OMNIDIRECTIONAL MULTI-	§
FACETTED ARRAY TO ALLOW SPACE	§
FOR AN INTERCONNECTION BOARD	§

Commissioner for Patents
Washington, D.C. 20231

POWER OF ATTORNEY FOR
PATENT APPLICATION

Nortel Networks Limited, a Canadian corporation having principal offices at:

**2351 Boulevard Alfred-Nobel
St. Laurent, Quebec H4S 2A9, Canada**

the owner by assignment of the entire right, title and interest to the invention for
OFFSETTING PATCH ANTENNAS ON AN OMNIDIRECTIONAL MULTI-
FACETTED ARRAY TO ALLOW SPACE FOR AN INTERCONNECTION BOARD,
by DUXBURY, Guy; SHEFFIELD, Robert; BOLZON, David; ABRAHAM, Ian; and
URQUHART, Andrew, and in and to the application for patent and any Letters Patent,
whether domestic or foreign, that may issue thereon, hereby appoints the following
attorneys and/or agents to prosecute this application and transact all business in the Patent
and Trademark Office connected therewith:

W. Charles Kent, Registration No. 26,135; and/or
William R. Edgar, Registration No. 27,522; and/or
Mitchell B. Charness, Registration No. 46,416; and/or
Adrian Zahl, Registration No. 35,774.

its attorneys with full power of substitution and revocation, to prosecute all domestic and
foreign patent applications, including PCT and EPO filings, relating to said invention and
to transact all business connected therewith, including signing of all papers on its behalf
and making alterations and amendments.

Please address all correspondence and telephone calls regarding this application to:

Mr. W. Charles Kent, of RIDOUT & MAYBEE LLP, whose full office address is 150 Metcalfe Street, 19th Floor, Ottawa, Ontario K2P 1P1, Canada,
Telephone No. (613) 236-1995.

The undersigned is the representative for the Assignee of the entire right, title, and interest in the patent application identified above, and is authorized to act on behalf of the Assignee.

29 Sept. '03
Date

NORTEL NETWORKS LIMITED

J-P Fortin
Name

Director, IP
Title